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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/917,246 | 07/27/2001 | Kevin J. Dowling | C01104/70074 | 8927 |

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| EXAMINER |
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PHILOGENE, HAISSA

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| ART UNIT | PAPER NUMBER |
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2821

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,246

Applicant(s)

DOWLING ET AL.

Examiner

Haissa Philogene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-107 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-11, 13-35, 37-41, 46-67, 69-74 and 79-103 is/are rejected.
- 7) ☒ Claim(s) 36, 42-45, 68, 75-78 and 104-107 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a sensing device (color, temperature, pressure, or motion sensor)” (claims 32-35, 64-67, 98, 99), and “a refrigerator having a front panel”, “user interface device”, “audio signal”, “video signal” (claims 36-38, 68-70, 100, 101) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28-31, 60-63 and 94-97 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the LED-based light source and the controller, does not reasonably provide enablement for “first radiation having a first wavelength and second radiation having a second wavelength” (claims 28, 60, 94), “a first intensity of the first radiation and a second intensity of the second radiation” (claims 29, 61, 95), “independently control at least the first intensity of the first radiation and the second intensity of the second radiation so as to vary a color of the

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generated radiation as perceived by an observer viewing the color-changing device from outside the enclosure" (claims 30, 62, 96), "independently control at least the first intensity of the first radiation and the second intensity of the second radiation so as to vary an overall brightness of the generated radiation as perceived by an observer viewing the color-changing device from outside the enclosure" (claims 31, 63, 97). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The examiner's position is that the specification discloses three different colored LEDs forming the LED-based light source being independently controlled through the control signals and the material converting energy from the LED to a different wavelength, but is silent about the above recited limitations. Thus, the specification fails to explain what components are used or connected and how to obtain at least first radiation having a first wavelength and second radiation having a second wavelength, how to independently control at least a first intensity of the first radiation and a second intensity of the second radiation, and so on. Such issues consequently raise doubt as to enablement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Merryman, Patent No. 4,532,579.

Merryman discloses in Figs. 1 and 2 a color-changing device (see Col.2, lines 32-35 and 39-47) comprising an enclosure 23 formed at least in part by an at least partially transparent material in front panel 22, and an illumination device 32, disposed within the enclosure 23, configured to illuminate said material in front panel 22 which may be of any color (see Col.3, lines 42-47 and 60), readable as being capable of generating at least two colors; said material being transparent or translucent; said material inherently including means or properties for reflecting off of or out of the material (see Col.4, lines 31-34); a control switch readable as a controller for controlling the illumination device (see Col.5, lines 8-10); the illumination device 32 being configured to project symbols (numbers) onto the enclosure 23.

Claims 1, 4-8, 21-27, 47, 48, 56, 59, 79-82, 84, 85, 87-89, and 91-93 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al., Patent No. 4,675,575.

Smith discloses in Fig.22 a color-changing device comprising an enclosure or appliance or electronics device with an inside surface 63 formed at least in part by an at least partially transparent material 67, and an illumination device (165, 168), disposed within the enclosure 63, configured to illuminate said material, the illumination device capable of generating at least two colors; said material being transparent or translucent; said material inherently including means or properties for reflecting off of or out of the material; said illumination device including an LED; a controller 256 for controlling the illumination device; said controller receiving input from a network (253-255); the

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illumination device (165, 168) being configured to project patterns 77 onto the enclosure 63; the illumination device including at least one LED-based light source which includes at least one red or green LED; the controller 256 being configured to control the at least one LED-based light source so as to vary a color (from red to green to yellow) of at least a portion of the enclosure as perceived by an inherent observer viewing the color-changing device from outside the enclosure (see Col.65, lines 24-33); the controller being configured to control the at least one LED-based light source so as to set a repetition rate (via timer 288) of a single color (see Fig.38 and Col.30, lines 21-24) projected onto the enclosure 63.

Claims 1, 2-9, 10, 11, 13-26, 32-35, 37-41, 46, 47, 49-58, 64-67, 69-74, 79, 80-84, 86-92 and 98-103 are rejected under 35 U.S.C. 102(b) as being anticipated by Hyatt, Patent No. 5,398,041.

Hyatt discloses a color-changing device comprising an enclosure or appliance or electronics device 720 with an inside surface formed at least in part by an at least partially transparent material (see Col.134, lines 54-56), and an illumination device (724-726 or 104), disposed within the enclosure, configured to illuminate said material (glass), the illumination device capable of generating at least two colors (see Fig.7C).

Hyatt further discloses said device being a computer (127, 251); said device including at least a scanner, a TV, a projection system; said material being at least transparent or translucent; said material inherently including means or properties for reflecting off of or out of the material as shown in Fig.7C by reflected signal 726; said illumination device including an LED (see Col.82, lines 44-45); further comprising a controller 128 for

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controlling the illumination device with control signals 133; said controller receives input 126 from a computer network 127; said controller receives input from a user of the color-changing device (see Col.8, lines 5-6); the illumination device may be configured to project patterns 988 onto the enclosure in a color projector; the illumination device including at least one LED-based light source (see Col.82, lines 44-45); the LED-based light source including at least one red LED, one green LED and one blue LED for use in color projector (see Col.92, lines 61-65); the controller 128 configured to control the at least one LED-based light source (see also Col.68, lines 22-32); the controller 128 may be configured to control the at least one LED-based light source so as to vary a color of at least a portion of the enclosure as perceived by an observer viewing the color-changing device from outside the enclosure by providing modulated signals 133; the controller may be configured to control the at least one LED-based light source so as to project patterns or symbols 988 onto the enclosure in a color projector; the controller being configured to control the at least one LED-based light source in response to at least one signal provided by a sensing device 134 via signal processors 118, 122; the sensing device 134 including at least a temperature sensor (see Col.40, lines 11-14); the controller being configured to vary a color of the enclosure in response to the at least one signal provided by the sensing device 134; the controller being configured to control the LED-based light source in response to at least one signal provided by at least one user interface device 650 (see fig.6A); the controller being configured to control the LED-based light source in response to at least one audio signal or at least one video signal 1461 (see Fig.14F); the color-changing device including a computer

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127 having an inherent enclosure; the controller being configured to control the LED-based light source in response to information received by the computer 127 via command signals 126; the controller being configured to control the LED-based light source so as to indicate representations of multiples pieces of information (108, 110) received by the computer on different portions of the enclosure. Further, discloses the at least illumination device 100 which may be edge-lighted or back-lighted (see Col. 28, lines 37-48 and capable of including at least incandescent lighting (see Col.1-8, line 60). As per claims 10, 11, 13 and 46, Hyatt discloses the claimed invention substantially as explained above.

As per claims 14-20, Hyatt further discloses the steps of generating an input signal 126 through a user interface 650, generating a control signal 132 in response to the input signal, communicating the control signal to a lighting system 100, and arranging the lighting system 100 to illuminate at a portion of the device enclosure (as shown in Fig.7C), said user interface capable of being a switch or a graphical user interface; the step of generating the input signal accomplished through a sensor or transducer 134 or by receiving a signal from the user 127 and said signal capable of being a network signal or database signal or info signal as provided by computer 127.

Allowable Subject Matter

Claims 36, 42-45, 68, 75-78, 104-107 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 28-31, 60-63 and 94-97 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pariza et al., Patent No. 6,268,845.

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Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (703) 305-3485. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (703) 308-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7722 for regular communications and after Final communications. The fax number for the examiner is (703) 740-4054.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

hp
December 16, 2002

Haissa Philogene
Primary Examiner
A.U. 2821
